



**Product Data Sheet &  
General Processing Conditions**

**RTP 2105 L  
Polyetherimide (PEI)  
Glass Fiber  
Lubricated**

**PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS**

| PERMANENCE                      | English      | SI Metric | ASTM<br>TEST |
|---------------------------------|--------------|-----------|--------------|
| Primary Additive                | 30 %         | 30 %      |              |
| Specific Gravity                | 1.50         | 1.50      | D 792        |
| Molding Shrinkage               |              |           |              |
| 1/8 in (3.2 mm) section         | 0.0020 in/in | 0.20 %    | D 955        |
| Water Absorption, 24 hrs @ 23°C | 0.180 %      | 0.180 %   | D 570        |

**MECHANICAL**

|                                   |                            |             |        |
|-----------------------------------|----------------------------|-------------|--------|
| Impact Strength, Izod             |                            |             |        |
| notched 1/8 in (3.2 mm) section   | 1.6 ft-lbs/in              | 85 J/m      | D 256  |
| unnotched 1/8 in (3.2 mm) section | 12.5 ft-lbs/in             | 667 J/m     | D 4812 |
| Tensile Strength                  | 25000 psi                  | 172 MPa     | D 638  |
| Tensile Elongation                | 2.0 - 3.0 %                | 2.0 - 3.0 % | D 638  |
| Tensile Modulus                   | 1.50 x 10 <sup>6</sup> psi | 10342 MPa   | D 638  |
| Flexural Strength                 | 35500 psi                  | 245 MPa     | D 790  |
| Flexural Modulus                  | 1.40 x 10 <sup>6</sup> psi | 9653 MPa    | D 790  |

**ELECTRICAL**

|                                  |               |               |       |
|----------------------------------|---------------|---------------|-------|
| Dielectric Strength, S/T, in oil | 500 VPM       | 19.7 kV/mm    | D 149 |
| Dielectric Constant, 1 MHz, Dry  | 3.9           | 3.9           | D 150 |
| Dissipation Factor, 1 MHz, Dry   | 0.0050        | 0.0050        | D 150 |
| Volume Resistivity               | > 1E12 ohm.cm | > 1E12 ohm.cm | D 257 |

**THERMAL**

|                        |               |              |        |
|------------------------|---------------|--------------|--------|
| Deflection Temperature |               |              |        |
| @ 264 psi (1820 kPa)   | 405 °F        | 207 °C       | D 648  |
| @ 66 psi (455 kPa)     | 410 °F        | 210 °C       | D 648  |
| Ignition Resistance*   |               |              |        |
| Flammability**         | V-0 @ 1/16 in | V-0 @ 1.5 mm | D 3801 |

**PROPERTY NOTES**

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

\* This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

\*\* Values per RTP Company testing.

**GENERAL PROCESSING FOR INJECTION MOLDING**

|                    | English           | SI Metric      |
|--------------------|-------------------|----------------|
| Injection Pressure | 12000 - 18000 psi | 83 - 124 MPa   |
| Melt Temperature   | 670 - 750 °F      | 354 - 399 °C   |
| Mold Temperature   | 275 - 350 °F      | 135 - 177 °C   |
| Drying             | 4 hrs @ 300 °F    | 4 hrs @ 149 °C |
| Moisture Content   | 0.04 %            | 0.04 %         |
| Dew Point          | -20 °F            | -29 °C         |

**PROCESSING NOTES**

Desiccant Type Dryer Required.